wholesale rates on the basis of retail rates. Nothing in the Act requires or, indeed, suggests that the Commission can or should prescribe rules regarding this section of the Act. The state commissions, who have considerable ratemaking expertise, are well equipped to implement the provisions of the Act.

The statutory standard for the states to apply in determining wholesale rates is clear: retail rates less avoided costs. The majority of the costs that are avoided as a result of resale are associated with the customer as opposed to a service. They are related to the functions of customer services, mailing the bill to the end user, some marketing functions (e.g., sales expense) and uncollectibles. For example, the costs of postage and paper for mailing the bill are shared among all of the services that an end user buys, but are direct with respect to the end user. The Commission is incorrect in its apparent belief that to the extent retail rates reflect contributions toward the recovery of joint and common costs, that such contributions would fall within the definition of avoided cost. The joint and common costs are service related and do not diminish because of resale.

On the other hand, resale activities cause new costs to be incurred by the LECs. For example, LECs will have to take orders from resellers. These orders will give rise to new service order costs. Such additional costs can be recovered through charges assessed directly on resellers (e.g., nonrecurring charges). If these additional costs were not recovered directly from resellers, then an alternative recovery mechanism would be to use a netting process whereby the wholesale price of the resold service would be the retail price of the resold service less the avoided cost of that service plus the additional cost incurred by the LEC due to resale. Either approach would satisfy the requirements of the

Act. State commission's are given the authority to make the determination which will be based on the local factors and conditions.

There are going to be variations between LECs and between localities. In authorizing state commissions to make the determination of wholesale rates, Congress recognized these differences and provided a mechanism to accommodate them. Congress did not intend or empower the Commission to devitalize state prerogatives.

The Commission also questions whether there is a relationship between the wholesale pricing rules and the pricing of unbundled elements. The pricing standards set forth in the Act for wholesale rates and rates for unbundled charges have distinct and disparate starting points. For wholesale rates, the starting point is the retail rate. On the other hand, the starting point for charges for unbundled elements is cost plus profit. They represent two distinct directions for which Congress provided without any requirement or expectation that they would yield charges that would bear a particular relationship.

Nor is there any a priori reason to believe that unbundled elements should some way add up to a retail rate. For example, the piece parts of an automobile can be obtained at a cost which will be considerably greater than an assembled car. Moreover, in telecommunications, intrastate retail prices are based on factors other than just cost. Often they reflect the policies of the state commission who approved the charges. Indeed, in suggesting that it impose an imputation requirement (i.e., that the sum of the rates for unbundled elements can be no greater than the retail rate), the Commission seems to overlook the fact that the state commissions, under Section 2(b) of the Communications Act, have exclusive ratemaking authority over intrastate rates and charges. Thus, it is not surprising, then, that Congress vested in the state commissions the pricing responsibilities under the new Act. Any attempt here by the Commission to create pricing rules to be followed by the states would not only interfere with the states ratemaking authority under the Communications Act, but also would be without any statutory basis under the new Act.[135]

C. Obligations Imposed on "Local Exchange Carriers" by Section 251(b)

Under the definition of "Local Exchange Carrier" in Section 153(26) of the 1996 Act, a commercial mobile service provider is not considered a LEC "except to the extent that the Commission finds that such service should be included in the definition of such term."[136] In the Notice, the Commission seeks comment on the criteria it should apply in deciding whether to classify a CMRS provider as a LEC.[137]

In deciding whether to permit CMRS providers to provide both fixed and mobile services, the Commission should strive both to achieve regulatory parity and to promote increased competition. As such, the offering of fixed wireless service as a substitute for local exchange service should be a primary consideration in whether to classify a CMRS provider as a LEC. If the Commission determines that a CMRS provider is offering a fixed wireless service that is being used as a substitute for local exchange service by a substantial portion of the public within a LEC's service area, then the Commission could consider whether to classify the CMRS provider as a LEC with regard to that service.

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135 Nowhere in § 252 is the Commission authorized to prescribe rules.

136 1996 Act, sec. 101, § 153(26).

137 Notice, ¶ 195.

The Commission should apply the criteria contained in Section 332(c)(3) when it considers the issue of whether a CMRS provider should be classified as a LEC.

1. Reciprocal Compensation For Transport and Termination of Traffic

a-c. Statutory Language/State Activity/Definition of Transport and Termination of Telecommunications

The Act imposes the duty on each LEC to establish reciprocal compensation arrangements with telecommunications carriers for the transport and termination of such carriers' telephone exchange traffic.[138] The reciprocal compensation agreement must provide for the mutual recovery of costs that are determined on the basis of "a reasonable approximation of the additional costs of terminating such calls."[139] As in the case of other sections of the statute, the recovery of cost should include joint and common costs. Nothing in the statutory language would preclude arrangements whose charges include a reasonable contribution toward the recovery of joint and common costs as well as reasonable profit.

Subject to certain specified constraints,[140] state commissions are vested with a wide latitude regarding implementing reciprocal compensation. Thus, a variety of approaches that are designed to facilitate and encourage negotiated arrangements can develop in the states without conflicting with the Act's requirements.

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[138] 1996 Act, sec. 101, § 251(b)(5).

[139] 1996 Act, sec. 101, § 252(d)(2).

[140] For example, states could not approve or force LECs to enter reciprocal compensation agreements that failed to provide for the recovery of each LEC's costs. Likewise, state commissions could not mandate bill-and-keep arrangements. The Act specifically reserves the right to waive reciprocal compensation to the negotiating parties.

Reciprocal compensation applies to the transport and termination of traffic. The Commission questions whether the charges for transport should be separate from termination. Earlier in these Comments, BellSouth explained that interconnection (negotiated pursuant to Section 251(c)(2)) pertains to the links that connect two networks. Transport and termination, which pertain to reciprocal compensation, apply from the point of interconnection back through the receiving carrier's network to the ultimate point of termination of the call. The Commission in questioning whether there should be a transport charge that is distinct from termination is presumably referring to that portion of reciprocal compensation which can be defined as transport from the point of interconnection between the parties to end office at which the call is terminated. This transport may or may not exist (e.g., if the point of interconnection and the end office at which the call terminates are the same, there would be no transport.) Conversely, if the two points are different there would be transport and the costs would vary by distance. Therefore, there should be a unique transport component(s) within the reciprocal compensation structure.

d. Rate Levels

The Commission questions regarding the different pricing rules for interconnection/unbundled elements and transport and termination further demonstrate why they are distinct concepts without overlap. Once this precept is understood, there should be no concern regarding the distinct pricing methods.

A carrier obtaining unbundled network elements is using those elements to fill out its own network. It will use the unbundled network elements in lieu of constructing its own facilities. Thus, in these circumstances, the carrier is not using the unbundled network elements to terminate traffic on the LEC network.

There is no need for the Commission to intervene in the statutory process for negotiating reciprocal compensation arrangements. The statute provides sufficient guidance to the state commission for evaluating such arrangements. As noted above, states have considerable discretion under the Act. Any rules promulgated by the Commission concerning pricing would impinge upon a state commission's authority under the Act and impair its ability to carry out its statutory duties.[141]

In any event the Commission's concern regarding a maximum charge is uncalled-for. Transport and termination is analogous to terminating switched access. Accordingly, switched access charges provide a natural cap on price for transport and termination.[142] No LEC could charge a rate for transport and termination that exceeds switched access because the interconnecting LEC would simply use the switched access services of the other LEC to terminate its traffic.

e. Symmetry

The Act is quite specific that reciprocal compensation must be based on "the mutual and reciprocal recovery by each carrier of costs associated with the transport and

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[141] The Commission should be reminded that nothing in the Act calls for it to develop rules regarding § 252.

[142] The switched access charges would encompass all usage sensitive charges including the residual interconnection charge and the carrier common line charge. Of course, to the extent the Commission establishes a federal universal service fund that shifts the recovery of universal service support from switched access to an explicit fund and thereby eliminates the residual interconnection charge and the carrier common line charge, the Commission will also be reducing the maximum charge for reciprocal compensation.

termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier's network."[143] The Commission is not free to rewrite the statutory requirements and require symmetry.

The fact of the matter is that the costs of an incumbent LEC are likely to be quite different than a new entrant. A new entrant can build and engineer its network based on the lowest cost technology that a forward-looking cost study reflects. In contrast, LECs have substantial embedded costs that still must be recovered. The Act allows for these differences as well as the opportunity of the carriers to recover their respective costs.

f. Bill and Keep Arrangements

Mandatory bill-and-keep arrangements are unquestionably inconsistent with the plain language of the Act. The Act requires that mutual compensation be based on each carrier's costs to transport and terminate interconnected traffic.[144] Bill-and-keep arrangements do not satisfy this essential predicate of the Act.

Under the express language of the Act, bill-and-keep arrangements are only permissible where the parties voluntarily agree to waive mutual recovery of costs.[145] The Commission is simply wrong that a state commission can bootstrap the authority to impose bill-and-keep arrangements through its ability to reject any agreement on the basis that is not consistent with the public interest.[146] No rejection of an interconnection

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143 1996 Act, sec. 101, § 252(d)(2).

144 1996 Act, sec. 101, § 252(d)(2)(A)(i)-(ii).

145 1996 Act, sec. 101, § 252(d)(2)(B)(i). Further, there is no question that this provision vests the right of waiver of the mutual recovery of costs to parties. The provision is a rule of construction instructing state commissions regarding their review of negotiated agreements that include arrangements that waive mutual recovery of costs.

146 See § 252(e)(2)(A)(ii).

agreement that included mutual and reciprocal recovery of costs could withstand judicial scrutiny. Such a rejection would be in contravention of the pricing standards set for in Section 252(d)(2) which define just and reasonable charges.[147]

Moreover, the Commission fails to recognize that any attempt by any commission to mandate bill-and-keep arrangements would constitute a taking without just compensation in violation of the Takings Clause of the Fifth Amendment of the constitution.[148] The requirement that a LEC transport and terminate traffic of another LEC constitutes a physical intrusion into the LEC's property.[149] It is well established that government action, regardless of how small, that requires a property owner to dedicate a portion of its property to use and transit by others constitutes a taking for Fifth Amendment purposes.[150]

The Constitution prevents regulatory agencies from establishing charges so low that they would be confiscatory. As the Supreme Court has stated:

> If the rate does not afford sufficient compensation, the State has taken the use of utility property without paying just compensations and so violated the Fifth...Amendment.[151]

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147 Clearly, if an arrangement meets the just and reasonable standard of the Act, it is by definition in the public interest.

148 U.S. Const. amend. V, made applicable to the States by U.S. Const. amend. XIV.

149 For example, BellSouth will have to engineer its network to accommodate the busy-hour traffic originated by all users including competing LECs. BellSouth will make investments in its physical property to accommodate this traffic in order to avoid degrading the service it provides to its customers. When an interconnecting LEC delivers traffic to BellSouth for termination on BellSouth's network, BellSouth is obligated to devote measurable network capacity to the carriage of this traffic, and, as a result, BellSouth's property is occupied by the interconnecting LEC's traffic.

150 <u>See</u>, <u>Loretto v. Teleprompter Manhattan CATV Corp.</u>, 458 US 419, 424-426 (1982).

151 <u>Dequesne Light Co. v. Barasch</u>, 488 US 299, 307-08 (1980).

A bill-and-keep requirement cannot pass constitutional muster because the LEC receives no compensation for the use of its property. The Takings Clause does not permit such a result.

g. Other Possible Standards

The Commission seeks comment on whether there are other means of determining the ceiling for reciprocal compensation including interim bill and keep arrangements. For the reasons discussed above, BellSouth does not believe that an interim bill and keep arrangement is appropriate. Further, there is no need for the Commission to determine rate levels for reciprocal compensation.

D. Duties Imposed on "Telecommunications Carriers" by Section 251(a)

BellSouth concurs with the Commission's conclusion that the term "telecommunications carrier" includes carriers providing basic local, interexchange and international services.[152] This is consistent with the inclusion of the term "telecommunications carrier" in Title II, which deals with common carriers. The two terms should be treated as synonymous.[153] A carrier may be a common carrier for some purposes, but not for others. For example, when a common carrier provides an information service, it is a common carrier for the provision of basic services, but a non-common carrier for the provision of the information service.[154]

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152 Notice, ¶¶ 245-246.

153 Notice, ¶. 247.

154 Notice, ¶ 246. See, e.g., Southwestern Bell v. FCC, 19 F. 3d 1475 (D.C. Cir. 1994).

E. Exemptions, Suspensions, and Modifications

BellSouth concurs in the Commission's s tentative conclusion that the states have the authority to make determinations under Section 251(f) regarding the termination of the rural telephone company exemption from the requirements of Section 251(c). The Commission should stand ready to assist state commissions and aid them with implementing their statutory responsibility. For example, the Act permits a LEC with fewer than 2 percent of the subscriber lines to petition for exemption or suspension of the Act's requirements.[155] The Commission could publish the number of lines that meet the 2 percent limit. There are likely other steps the Commission can take and the Commission would be well served to seek guidance both from state commissions and small telephone companies. A cooperative approach between this Commission and the state commissions will best serve the public interest.

F. Continued Enforcement of Exchange Access and Interconnection Regulations

As the Joint Explanatory Statement of the Committee of Conference makes clear, Section 251(g) was adopted to preserve the status quo ante with regard to the equal access and nondiscrimination obligations of all LECs, including the receipt of compensation, that existed on the date of enactment. This interim regulatory framework will remain in effect until the Commission adopts new regulations in these areas. The source of the obligation is immaterial.[156] Not only are obligations imposed by various

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155 1996 Act, sec. 101, § 251(f)(2).

156 See Joint Explanatory Statement of the Committee of Conference, CR-113: "In the interim, between the date of enactment and the date the Commission promulgates new regulations under this section, the substance of this new statutory duty shall be the equal

court orders and consent decrees saved by this Section, but also rights and obligations arising under any "regulation, order or policy of the Commission."[157] Thus, the Commission's Part 69 rules, which define the rights and obligations of LECs and interexchange carriers for the provision and compensation for interstate, interexchange access services, remain in effect until superseded by new regulations adopted by the Commission after the date of enactment of the 1996 Act. Section 251(i) supports this conclusion. Section 251(i) makes it clear that the requirements of Section 251 do not supersede the Commission's authority under Section 201 of the Communications Act of 1934, which was the source authority for the adoption of the Part 69 rules.

G. Advanced Telecommunications Capabilities

Section 706(a) of the 1996 Act requires the Commission and each State commission to encourage the deployment of advanced telecommunications capabilities "utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." In the context of Sections 251 and 252, the Commission can best advance the goals of Section 706(a) of the 1996 Act by permitting the carriers the freedom to negotiate efficient and mutually acceptable interconnection arrangements without imposing unnecessary restrictions on the negotiation process. Throughout these Comments, BellSouth has pointed out areas where the tentative conclusions reached by

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access and nondiscrimination restrictions and obligations, including the receipt of compensation, that applied to the local exchange carrier immediately prior to the date of enactment, regardless of the source."

[157] 1996 Act, sec. 101, § 251(g).

the Commission are far more restrictive than necessary to implement the express requirements of Section 251. The Commission should temper its desire to create uniform national rules governing interconnection with the recognition that overly restrictive federal regulations may prevent the carriers from negotiating the most efficient, cost effective interconnection agreements possible. Such a result will hamper, not promote, the goals of Section 706(a) of the 1996 Act.

III. PROVISIONS OF SECTION 252

A. Arbitration Process

The 1996 Act authorizes the state commissions to mediate disputes arising during interconnection negotiations under Section 251,[158] and to arbitrate any issues upon which the parties cannot reach agreement.[159] Under Section 252(e)(5), if the state commission fails to act, the Commission shall issue an order preempting the state commission's jurisdiction and shall act for the state commission in that proceeding.

BellSouth believes that the Commission should establish procedures to fulfill its responsibility under Section 252(e)(5).[160] The Commission should adopt regulations that provide:

1) That any party aggrieved by a failure of a state commission to act in accordance with Section 252, following a reasonable request to the state commission, may file a petition for preemption with the Commission.

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158 1996 Act, sec. 101, § 252(a)(2).

159 1996 Act, sec. 101, § 252(b)(1).

160 Notice, ¶ 265.

2) Such petition should set forth with particularity the action requested of the state commission; the date and manner in which the request was made; the response of the state commission, if any; and the action requested of the Commission. The petition should be served upon the state commission and the other party or parties to the negotiations.

3) The Commission should afford the state commission and the other party or parties to the negotiation a reasonable time to respond to the petition. After considering any such responses, the Commission should determine whether the state commission has failed to mediate or arbitrate in a timely manner a matter entrusted to it under Section 252.

4) If the Commission determines that the state commission has not fulfilled its responsibility under Section 252, the Commission should preempt the state commission and assume the responsibilities of the state commission with regard to that proceeding.

5) The Commission should act within the same time frames as the Act requires state commissions to complete the arbitration process.

The Commission should not preempt a state commission for failure to act in a situation governed by Section 252(e)(4). Where there has been submitted to the state commission an agreement reached through negotiation or arbitration, a failure to act within the statutory time frame results in that agreement becoming effective by operation of law. Under such circumstances, there is nothing for the Commission to preempt. If the Commission does preempt, it is bound by the same standards set forth in Section 252(e) governing approval by a state commission, including the application of relevant state law under Section 252(e)(3).[161] Once the Commission assumes the responsibility of a State

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[161] Notice, ¶ 266.

commission under Section 252(e)(5), it should retain jurisdiction over the proceeding until it is concluded.[162]

B. Section 252(i)

The Joint Explanatory Statement of the Committee of Conference describes Section 251(i) as follows:

> Section 252(i) requires a local exchange carrier to make available on the same terms and conditions to any telecommunications carrier that requests it any interconnection, service, or network element that the local exchange carrier provides to any other party under an approved agreement or statement.[163]

In the Notice, the Commission tentatively concludes that the language in the statute appears to preclude differential treatment of carriers, even if they are not similarly situated.[164] BellSouth respectfully disagrees. As discussed in response to Section II.B.2.d.(5),[165] BellSouth believes that the terms "nondiscriminatory" in the 1996 Act and "unreasonable discrimination" in the 1934 Act have the same meaning, and that each prohibits only unreasonable discrimination as between similarly situated carriers. Congress could not have intended to outlaw any differences in treatment of interconnecting telecommunications carriers that are not similarly situated. Had Congress intended such a draconian view of its nondiscrimination obligation, it would hardly have opted for individually negotiated settlements as the preferred regulatory paradigm. An absolute nondiscrimination requirement could only be met through tariffs, an approach considered

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162 Notice, ¶ 267.

163 Joint Explanatory Statement at 126.

164 Notice, ¶ 270.

165 See BellSouth's Comments in response to paragraphs 155-156 of the Notice, supra.

and rejected by Congress. In an environment of individually negotiated interconnection agreements, an absolute bar on any differentiation among parties would mean that once one interconnection agreement was negotiated, no other telecommunications carrier could obtain any element of that interconnection agreement on different terms and conditions.

The better interpretation of Section 252(i) is that attributed to Ameritech in the Notice.[166] Under that interpretation, once an interconnection agreement has been negotiated with a requesting telecommunications carrier, that entire agreement must be made available to any other telecommunications carrier willing to accept all of the same terms and conditions. This is similar to the AT&T Tariff 12 provisions that the Commission found lawful under the antidiscrimination provisions of the 1934 Act. The reference in the Notice to the legislative history of S.652 is unenlightening.[167] The House did not recede to the Senate bill, as shown by the legislative history quoted above. Instead, new language was drafted, and the legislative history does not clarify the issue posed in the Notice.

Nothing in the statute defines how long a negotiated agreement must remain available to another telecommunications carrier.[168] BellSouth believes that such a negotiated agreement should remain available to other telecommunications carriers for a reasonable length of time. If a LEC argues that there have been sufficient changed circumstances to warrant not making an existing agreement available to a requesting telecommunications carrier, it should bear the burden of proving the existence of changed

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166 Notice, ¶ 271.

167 Notice, ¶ 271.

168 Notice, ¶ 272.

circumstances that make the existing agreement no longer appropriate. Evidence of such changed circumstances could be established by showing that the LEC has sought to reopen negotiations with the telecommunications carrier with which the existing agreement was negotiated.

IV. CONCLUSION

The purpose of this proceeding is to implement a key component to the new "pro-competitive, de-regulatory, national policy framework" represented by the 1996 Act. Sections 251 and 252 provide the backbone for local exchange competition. The statutory framework is based upon negotiated interconnection arrangements. As BellSouth has shown in these comments, the Commission can best meet the objectives of the Act and fulfill the intent of Congress by refraining from crafting an overly intrusive set of regulations that will stifle a carrier's ability to reach negotiated agreements. Detailed national rules will not permit the negotiation process to operate as intended by Congress.

Accordingly, the Commission should simply codify the statutory language that is self-effectuating and limit any additional rules to specific matters that are shown to be instances that the statute requires a Commission determination.

Respectfully submitted,

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INTERCONNECTION AND ECONOMIC EFFICIENCY

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I. Introduction

The Telecommunications Act of 1996 (the Act) strongly supports competition in local telecommunications. To promote competition, the Act mandates, *inter alia*, interconnection of competing networks, reciprocal compensation among interconnected carriers, unbundling of network components and resale of service offerings. The FCC and state regulatory commissions are assigned responsibility for implementing these various procompetitive provisions of the Act.

The Act and its implementation focus largely on *technical* integration of competitors into the network. Technical issues include number portability, dialing parity, and the feasibility of unbundling and interconnection at various points in the network. Technical integration is obviously necessary to allow the incumbent's customers and customers of entrants to communicate effectively with each other.

The need for *economic* integration of competitors may be less obvious, but it is no less essential for economically productive outcomes. The goal of economic integration is for the combined network of incumbents and new competitors to be as efficient as possible; *i.e.*, to meet customer needs as well as possible, at minimal combined cost (the incumbent's costs plus competitors' costs).

Unregulated competitive markets usually afford strong incentives for efficient economic integration. Market forces (Adam Smith's "Invisible Hand") reward efficient entrants with profits over and above the cost of capital. At the same time, market forces punish inefficient firms for entry and usually compel such firms to exit the market or restrict the scope of their operations. As a result of these strong positive and negative incentives, the surviving firms are generally likely to be quite effective at meeting customer needs at low combined (total industry) cost.[1]

Economic integration is much more problematic in a regulated industry such as local telecommunications. To achieve economic integration, regulators must steer a careful course between Scylla and Charybdis.[2] Scylla, in this case, is allowing inadequate scope for competition. Competitors who could make important contributions to the market may be excluded if regulatory policy fails to afford adequate scope for competition. Competitors may be prohibited from competing at all, face excessive red tape, and/or be interconnected inadequately or disadvantageously to the incumbent's network. As a result, some or all of the potential benefits of competition may be lost.

The other hazard, Charybdis, is equally serious. Charybdis, in this case, involves establishing uneconomic regulatory giveaways for new entrants. Attracted by a regulatory giveaway, firms may enter, even though their doing so worsens overall economic efficiency. (In an unregulated competitive market, such entry would be punished by market forces — not encouraged.) The regulatory giveaway may take the following form:

- The incumbent's rate structure is economically inefficient. Some services are priced far above costs, while others are below economically-efficient (Ramsey) levels. Competitors naturally enter the markets where prices far

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1 The typical personal-computer system provides an excellent example of effective economic integration. The system may contain components from firms in the U.S., Japan, and a variety of newly-industrialized and developing countries. The competitive market coordinates the efforts of all these firms. As a result of market forces, the personal-computer system, *considered as a whole*, has ever-increasing functionality at declining cost.

2 *See* J. Haring, "Can Local Communications Be Self-Policing?," *Telecommunications Policy*, Vol. 19, No. 2, pp. 92-93. ("The problem for policymakers is how to navigate between the Scylla and Charybdis of overly or inadequately interventional policies.") *See* also J. Haring, "Implications of Asymmetric Regulation for Competition Policy Analysis," FCC Working Paper Series, Number 14, December 1984.

exceed costs. Then (and this constitutes the giveaway), regulators do not permit the incumbent to restructure rates in an economically-efficient manner.

This giveaway yields the opposite of economic integration. It provides umbrella pricing, under which high-cost entrants may proliferate. At the same time, the incumbent will ultimately face financial distress. Customers who have no alternative to the incumbent will then endure degraded service. This scenario provides a good description of railroad regulation in the United States in the middle part of this century. As the Interstate Commerce Commission (ICC) was sucked into the whirlpool of Charybdis, the railroad industry was transformed from an efficient, well-managed industry (in the 1920s) to a national disaster.[3]

Another form of regulatory giveaway is as follows:

- The incumbent is required to sell essentially the same service to competitors at a substantially lower price than to end users. Competitors would then be attracted solely to perform an arbitrage function.

As before, the giveaway yields the opposite of economic integration. Indeed, the operating costs of arbitrageurs may be pure economic waste.

In this submission, we consider the economic aspects of four specific issues: interconnection pricing, reciprocal compensation, unbundling and resale. In each case, we attempt to indicate how regulators can steer a middle course between Scylla and Charybdis. That is, we attempt to describe policies that provide wide scope for efficient competitive entry without offering any uneconomic regulatory giveaways that will reduce economic efficiency and harm consumers.

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[3] In specific terms, rail prices for shipping manufactured goods far exceeded costs. Prices for shipping bulk commodities and agricultural products were far below Ramsey levels (though the prices may have covered incremental costs). This rate structure became unsustainable with the advent of trucking competition. The ICC lacked the political courage to allow railroads to restructure rates. This regulatory failure contributed substantially to the destruction of the U.S. railroad industry. For further detail on railroad misregulation, see J. R. Meyer, M. J. Peck, J. Stenason and C. Zwick, *The Economics of Competition in the Transportation Industries* (Cambridge: Harvard University Press, 1959) and A. E. Kahn, *The Economics of Regulation: Principles and Institutions*, John Wiley & Sons, Inc., Vol. II, pp. 14-28.

II. Pricing and Reciprocal Interconnection

The Act requires incumbent LECs to interconnect with any requesting telecommunications carrier.[4] It also requires all LECs, whether incumbents or not, to establish reciprocal compensation arrangements for the transport and termination of telecommunications.[5] As the FCC points out in the Notice, the Act provides different pricing standards for interconnection and reciprocal compensation.[6] Interconnection prices are to be based on cost (plus a reasonable profit).[7] Reciprocal compensation is to provide for the recovery, by each carrier, of the costs incurred to transport and terminate calls from other networks.[8]

In this section, we argue that regulatory flexibility is key to establishing an effective interconnection and reciprocal compensation policy. We believe that the FCC's rules should allow the interconnecting companies considerable flexibility to negotiate the manner and compensation for interconnection and reciprocal compensation for termination of local calls. Under the Act, such negotiations are the preferred means to establish arrangements between competing carriers. The FCC should not prescribe specific rules for interconnection terms, conditions, or pricing nor for compensation arrangements. The FCC should instead simply outline general objectives for negotiated interconnection arrangements, and monitor to ensure that national objectives are met.[9]

Flexibility is especially important because the current telecommunications rate structure is so seriously distorted relative to an economically efficient rate structure. As a result of state and federal regulatory policies, pursued for decades, current prices diverge substantially from economically efficient rates. Under these circumstances, any inflexible approach to rate-setting, which does not

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[4] 47 USC 251(c)(2).

[5] 47 USC 251(b)(5).

[6] Notice at para. 54.

[7] 47 USC 252(d)(1).

[8] 47 USC 252(d)(2).

[9] Seemingly, any number of specific interconnection arrangements might satisfy the federal interest in a competitive marketplace.

permit variation to reflect differences in operating conditions, is a sure recipe for disaster. Inflexible interconnection pricing would almost surely distort incentives and create inefficiency (economic disintegration) — especially given that current prices are so far out of line. Inefficient results seem all the more certain if an inflexible approach is chosen largely on the basis of administrative expediency, rather than sound economic analysis.

The first-best policy for dealing with distorted prices is to remove the distortions; *i.e.,* allow LECs to restructure rates so as to promote economic efficiency. At the federal level, switched access charges should be reduced, while SLCs should be increased. At the state level, access and toll charges should be reduced, while monthly charges for local telephone service should be increased.

It is unfortunate — indeed, in our view, a national embarrassment — that this restructuring has not already occurred.[10] The problem has been well-understood for over a decade. Indeed, as early as 1981, NTIA estimated that distorted telecommunications pricing caused economic waste of billions of dollars. Yet, the problem remains largely unsolved in 1996.[11]

Let us now consider some arbitrage possibilities and other incentives for inefficiency that exist under the current rate structure

A. Disguised Switched Access

Some local-interconnection charges will very likely be lower than switched-access charges. Under these circumstances, all carriers have the incentive to terminate interstate and interLATA calls on other carriers' networks and claim that the calls are local. This practice may be prohibited by law

[10] Contrast the current situation in the United States with circumstances in the United Kingdom where significant rebalancing has been undertaken and rates are much more nearly rebalanced. Rebalanced rates supply appropriate signals to guide economically efficient investment. Unbalanced rates promote waste of scarce investment resources.

[11] In 1993, the disparity between price and marginal cost was estimated to be $20 billion per year. *See* C. S. Monson and J. H. Rohlfs, "The $20 Billion Impact of Local Competition in Telecommunications" (Bethesda, Maryland: Strategic Policy Research, Inc. for the United States Telephone Association, 1993). There has been little, if any, improvement since then. *See* also C. S. Monson and J. H. Rohlfs, "Teleport Shoots Foot (Own)! — Analysis of Gail Garfield Schwartz's Critique of 'The $20 Billion Impact of Local Competition in Telecommunications'," (Bethesda, Maryland: Strategic Policy Research, Inc. for United States Telephone Association, August 24, 1993); and J. Haring, "Can Local Communications Be Self-Policing?," *op. cit.*

and/or regulatory rules, but enforcement is likely to be very difficult/impossible. The terminating carrier has no easy way to determine the origin of a call.

Competitive entrants (including affiliates and business units of interexchange carriers) have the prospect of earning large profits through this practice. This prospect may attract inefficient entrants who bring nothing to the market but a willingness to engage in fraud (that is virtually impossible to detect). We do not believe that the major CLECs (*e.g.*, MFS, Teleport, MCI Metro) would engage in fraud. However, they may be unable to distinguish the traffic themselves. In addition, many companies would knowingly permit misrepresentation of traffic if they could get away with it. The best way to avoid such fraud and abuse is to allow the incumbent to restructure rates, as described above. Restructuring would improve economic efficiency, even apart from competitive concerns. With competition, restructuring is essential to eliminate the potential for fraud and abuse and the associated perverse incentives for inefficiency. In any event, until the incumbent is allowed to restructure rates, possibilities and incentives for fraud and abuse will be present. Regulators need to seriously consider the potential for fraud and abuse in implementing interconnection policies.

B. Other Inefficiency Incentives

Other inefficiency incentives can best be illustrated with respect to a local area that has mandatory measured service for business customers. In general, measured-service charges, where present, exceed the incremental cost of local usage. They therefore provide a contribution to common and overhead (C&O) costs. In this circumstance, suppose that regulators require the incumbent LEC to pay a termination charge that embodies a high contribution. Entrants would then have an incentive to sign up customers (*e.g.*, Internet-access providers) who receive many more calls than they make. The entrants may profit even if they are less efficient than the incumbent. Their primary role in the market is to undo the regulatory policy of high interconnection charges.[12]

Suppose, on the other hand, that regulators set an interconnection price that is much lower than the incumbent's charge for measured service. Under those circumstances, entrants have the

[12] The recently announced integration of MFS and UUNet illustrates the potential for competitive LECs to focus their efforts on signing up customers, such as UUNet, whose traffic consists almost entirely of receiving calls. As one of the nation's largest Internet service providers, UUNet almost surely receives an overwhelming number of calls compared to those it initiates on its own.

incentive to sign up customers (*e.g.*, telemarketers) who make many more calls than they receive. The entrants may profit, even if they are less efficient than the incumbent. Indeed, they may maximize profits by having a network of small geographic scope and primarily perform an arbitrage function.

C. Need for Flexibility

The above discussion demonstrates an important point:

- With the distortions in the current rate structure, *no* set of interconnection charges can entirely avoid presentation of arbitrage opportunities and perverse incentives for inefficiency.

As stated above, the first-best solution is to allow incumbents to restructure rates toward economically efficient levels. In the meantime, the best that can be done is to minimize the inevitable arbitrage possibilities and incentives for inefficiencies.

Interconnection charges that minimize these problems probably vary considerably from area to area. The charges would depend, for example, on:

- whether the area has local measured service, and if so, whether it is mandatory;
- the calling patterns of large customers; *e.g.*, percent of calls that are incoming versus outgoing;
- whether entrants use wireless or wireline technology; and
- the incumbent's technology, which affects the ratio between incremental cost and total cost.

Fashioning regulatory rules that take all such factors into account is obviously impossible. Consequently, any inflexible procedure for setting interconnection rates will turn out to be inappropriate in many areas.

We believe that the best regulatory approach is to allow carriers considerable flexibility in negotiating interconnection agreements. Carriers *can* be expected to take all the above factors into account in their negotiations.

D. Bill and Keep

One particular inflexible approach to interconnection pricing is "bill-and-keep." Bill-and-keep makes compensation an in-kind arrangement. Each carrier is expected to terminate all local traffic handed to it without an explicit charge; it can expect other carriers to do the same when it hands traffic off to them. Bill-and-keep has the advantage of requiring no measurement of local traffic, as there is no inter-carrier billing required. It also facilitates the offering of flat-rated local calling plans by competitors.

Bill-and-keep, nevertheless, suffers several very serious shortcomings. It maximizes the incentives for fraud or abuse through disguise of switched access. Under bill-and-keep, there are no charges for terminating traffic; so the entire amount of switched access charges can be saved via fraud and abuse. Because of these incentives, one can confidently predict that among all methods for determining interconnection charges, bill-and-keep will lead to maximal fraud and abuse from disguise of switched access.

Another shortcoming of bill-and-keep is to create weak incentives for a competitor to deploy an extensive local network. Under bill-and-keep, CLECs have every incentive to hand off calls at the nearest switch of an incumbent. They derive no benefit from carrying a call across town. Bill-and-keep could easily spawn a large collection of CLECs, each having limited geographical scope and performing largely an arbitrage function.

Incumbent noncompeting LECs frequently use bill-and-keep for extended area service in bordering exchanges.[13] They have a convenient demarcation point, the exchange boundary, to establish each carrier's responsibility to build and maintain facilities. Frequently, each carrier builds and maintains its own facilities up to the exchange boundary. However, with overlapping service areas, competing LECs have no convenient demarcation point. Why would one carrier handle a call any

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[13] It is worth noting that these arrangements (as well as pooling of interstate revenues), grew out of an environment of rate-of-return regulation. Thus, a carrier that struck a bad deal was still entitled to earn a fair return. In contrast, connecting CMRS providers, which are not rate-of-return regulated, do *not* generally use bill-and-keep arrangements. *See* J. H. Rohlfs, H. M. Shooshan III and C. S. Monson, *Bill-and-Keep: A Bad Solution to a Non-Problem*, filed before the Federal Communications Commission, *In the Matter of Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers* (CC Docket No. 95-185) and *Equal Access and Interconnection Obligations Pertaining to Commercial Mobile Radio Service Providers* (CC Docket No. 94-54), Attachment to the Comments of the United States Telephone Association, March 4, 1996.